

Popular and Scientific Attitudes Regarding Pandemic Influenza

To the Editor: Blendon et al. (1) described a survey of public attitudes regarding Americans' willingness and ability to follow the advice of public health officials during a severe influenza pandemic. The authors' results, however, can only be considered indicative if Americans' perceptions of pandemic influenza during the next pandemic are comparable to those associated with the hypothetical event they imagined while participating in the survey by Blendon et al.

By asking respondents to imagine a "severe outbreak" of "a new type of flu," the authors likely portrayed to survey participants an image of pandemic flu as an event starkly different from ordinary flu seasons. Although such a contrast reinforces popular perceptions of pandemic flu as a catastrophic event (2), it is not supported by historical studies which show that, in terms of deaths, recent pandemics have been comparable to (3) or less deadly than (4) ordinary influenza seasons.

A gap thus exists between the perceptions and reality of pandemic influenza. Although the authors described pandemic flu as an "unfamiliar crisis" that "many of the respondents may not have been familiar with," in actuality, 39% of survey respondents were ≥ 50 years of age and therefore had firsthand experience of 1 or more past pandemics. (The last 2 pandemics occurred in 1957 and 1968; a pandemic was predicted in 1976, but never materialized.) Whether those respondents were aware that they had lived through past pandemics is a question with important implications for the survey results, but unfortunately, this understanding was not queried by the authors. For example, would all of the 94% of respondents who reported a willingness to isolate themselves at home for 7–10 days if that was recommended by health authorities—in effect,

“voluntarily” placing themselves in quarantine—also be willing to do so during a pandemic no more severe ordinary influenza?

If even those who have experienced pandemics do not recall them as particularly memorable events, it calls for a rethinking of public communication strategies with respect to influenza. Perhaps a first step is to acknowledge that as the past 2 pandemics have not been public health crises, the next pandemic may likewise also not be a crisis.

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References

1. Blendon RJ, Koonin LM, Benson JM, Cetron MS, Pollard WE, Mitchell EW, et al. Public response to community mitigation measures for pandemic influenza. *Emerg Infect Dis*. 2008;14:778–86. [Medline](#)
2. Appenzeller T. Tracking the next killer flu. *Natl Geogr Mag*. 2005;208:2–31.
3. Doshi P. Trends in recorded influenza mortality: United States, 1900–2004. *Am J Public Health*. 2008;98:939–45. [Medline](#) DOI: [10.2105/AJPH.2007.119933](https://doi.org/10.2105/AJPH.2007.119933)
4. Simonsen L, Taylor R, Viboud C, Dushoff J, Miller M. US flu mortality estimates are based on solid science [internet]. *BMJ* [rapid response]. 2006 Jan 11 [cited 2008 May 4]. Available from: <http://www.bmj.com/cgi/eletters/331/7529/1412#125778>

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In Response: We agree with Doshi (1) that in our study reported in “Public Response to Community Mitigation Measures for Pandemic Influenza” (2), we purposely asked respondents to imagine a “severe outbreak” of “a new type of flu,” and that possible scenario was vastly different from ordinary flu seasons. Although previous pandemics have varied in their severity (3) and their concomitant illness and mortality rates, we were particularly interested in the public’s response to community mitigation interventions (4) that would only be recommended if a severe 1918-like pandemic occurred (e.g., Pandemic Severity Index 4 or 5).

A great deal of cooperation from the public would be required to successfully implement community mitigation measures during a pandemic. The intensity of interventions must be matched with the severity of a pandemic to maximize the available public health benefit that may result from using these measures while minimizing untoward secondary effects. Socially disruptive measures such as dismissing children from schools, closing childcare programs, social distancing in the community and at the workplace, and cancelling large gatherings would likely reduce community transmission of pandemic disease, but would also create challenges for the public. Therefore, these interventions would only be recommended if the severity of the pandemic warranted their use. The survey was conducted to inform policy-makers who were, at the time, developing recommendations for community-based interventions. Thus, a severe pandemic was used as the scenario for this national survey to gauge the public’s response to these proposed public health measures.

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References

1. Doshi P. Popular and scientific attitudes regarding pandemic influenza. *Emerg Infect Dis*. 2008 Sep; [Epub ahead of print]
2. Blendon RJ, Koonin LM, Benson JM, Cetron MS, Pollard WE, Mitchell EW, et al. Public response to community mitigation measures for pandemic influenza. *Emerg Infect Dis*. 2008;14:778–86.
[Medline](#)
3. US Department of Health and Human Services. Pandemics and pandemic threats since 1900 [cited 2008 Jun 30]. Available from <http://www.pandemicflu.gov/general/historicaloverview.html>
4. Centers for Disease Control and Prevention. Interim pre-pandemic planning guidance: community strategy for pandemic influenza mitigation in the United States. 2007 Feb [cited 2008 Jun 30]. Available from <http://www.pandemicflu.gov/plan/community/commitigation.html>

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